

WHAT IS CLAIMED IS:

1. An electric equipment comprising:

a first battery;

an electric condenser which has an internal resistance lower than that of the first battery and which serves to accumulate therein an electric power of the first battery;

charge control circuit which controls a charge current originating from the electric power of the first battery and caused to flow from the first battery to the electric condenser; and

a load which is driven with the electric power accumulated in the electric condenser,

wherein the charge control circuit controls the charge current in correspondence to a self-discharge rate of the first battery.

2. An electric equipment according to claim 1, wherein the charge control circuit controls the charge current so that a battery voltage drop developed across the first battery falls within a range of 5 to 20% of a battery voltage when the first battery is in an open state.

3. An electric equipment according to claim 1, wherein the charge control circuit controls the charge current so that a battery voltage drop developed across the first battery falls within a range of 10 to 40% of a battery voltage when the first battery is in an

open state.

4. An electric equipment according to claim 1, wherein the charge control circuit has a DC-DC converter for converting the electric power of the first battery into a conversion electric power having a different voltage, and

wherein a quantity of the conversion electric power of the DC-DC converter is controlled to control the charge current.

5. An electric equipment, comprising:

a first battery;

an electric condenser which has an internal resistance lower than that of the first battery and which serves to accumulate therein an electric power of the first battery;

a charge control circuit which controls a charge current originating from the electric power of the first battery and caused to flow from the first battery to the electric condenser; and

a load which is driven with the electric power accumulated in the electric condenser,

wherein the load is driven in a first operation mode or a second operation mode consuming more current than in the first operation mode, and

wherein the charge control circuit charges the electric condenser in a first charge control mode with a charge current which

is larger than a current consumed when the load is driven in the first operation mode, and is smaller than a current consumed when the load is driven in the second operation mode.

6. An electric equipment according to claim 5, wherein the charge current is controlled so that a battery voltage drop developed across the first battery falls within a range of 5 to 20% of the battery voltage when the first battery is in an open state.

7. An electric equipment according to claim 5, wherein a self-discharge rate of the first battery is 10% higher, and

wherein the charge current is controlled so that a battery voltage drop developed across the first battery falls within a range of 10 to 40% of the battery voltage when the first battery is in an open state.

8. An electric equipment according to claim 5, wherein the charge control circuit has a DC-DC converter for converting the electric power of the first battery inputted into a conversion electric power having a different voltage, and

wherein a quantity of the conversion electric power of the DC-DC converter is controlled to control the charge current.

9. An electric equipment according to claim 5, wherein the

charge control circuit charges the electric condenser in a second charge control mode with a charge current equal to or larger than the current consumed when the load is driven in the second operation mode, and

wherein when a quantity of accumulated electric power of the electric condenser exceeds a quantity of desired electric power, the electric condenser is charged in the first charge control mode, and when the quantity of accumulated electric power of the electric condenser is equal to or less than the quantity of desired electric power, the electric condenser is charged in the second charge control mode.

10. An electric equipment according to claim 9, wherein a voltage of the electric condenser becomes equal to a predetermined voltage so that the quantity of accumulated electric power of the electric condenser becomes equal to the quantity of desired electric power.

11. An electric equipment according to claim 10, wherein the charge control circuit has a DC-DC converter for converting the electric power of the first battery into a conversion electric power having a different voltage, and

wherein a quantity of the conversion electric power of the DC-DC converter is controlled to control the charge current.

12. An electric equipment according to claim 11, wherein the DC-DC converter includes a voltage control function of controlling the conversion electric power so that the voltage of the electric condenser becomes equal to the predetermined voltage, and

wherein the voltage control function operates in the second charge control mode.

13. An electric equipment according to claim 11, wherein the DC-DC converter includes a first DC-DC converter for controlling the charge current so that a battery voltage drop developed across the first battery becomes a predetermined amount, and a second DC-DC converter for controlling the charge current so that the voltage of the electric condenser becomes equal to the predetermined voltage, and

wherein in the first charge control mode, the electric condenser is charged using the first DC-DC converter, and in the second charge control mode, the electric condenser is charged using the second DC-DC converter.